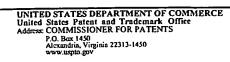


United States Patent and Trademark Office



NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

02/19/2004

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938 Minneapolis, MN 55402 EXAMINER RIVELL, JOHN A

ART UNIT

PAPER NUMBER

3753

DATE MAILED: 02/19/2004

APPLICATION NO.	FILING DATE FIRST NAMED INVEN	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,796	12/26/2000	Jeffrey E. Stahmann	279.315US1	3317

TITLE OF INVENTION: APPARATUS AND METHOD FOR PACING MODE SWITCHING DURING ATRIAL TACHYARRHYTHMIAS

г	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
L	nonprovisional	NO	\$1330	\$0	\$1330	05/19/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.





Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938 Minneapolis, MN 55402

02/19/2004

7590

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

hereby certify that this Fee(s) Transmittal is being deposited with the Unite States Postal Service with sufficient postage for first class mail in an envelop addressed to the Mail Stop ISSUE FEE address above, or being facsimil ransmitted to the USPTO, on the date indicated below.
(Depositor's name
(Signature
(Date

CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 3317 279.315US1 Jeffrey E. Stahmann 12/26/2000 09/748,796

TITLE OF INVENTION: APPARATUS AND METHOD FOR PACING MODE SWITCHING DURING ATRIAL TACHYARRHYTHMIAS

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nonprovisional	NO	\$1330		\$0	\$1330	05/19/2004
EXAMINER		ART UNIT		CLASS-SUBCLASS]	
RIVELL, JOHN A		3753		607-015000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). U Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. U "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			names of agents OR firm (havin agent) and	nting on the patent front page up to 3 registered patent and the patent and the patent and the name of as a member a registered at the names of up to 2 registered and the name is listented.	attorneys or 1 c of a single I attorney or 2 stered patent	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE

u individual u corporation or other private group entity u government Please check the appropriate assignee category or categories (will not be printed on the patent); 4b. Payment of Fec(s): 4a. The following fee(s) are enclosed: ☐ A check in the amount of the fee(s) is enclosed. ☐ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. ■ Publication Fee I The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to □ Advance Order - # of Copies .

Deposit Account Number

Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/748,796	12/26/2000	Jeffrey E. Stahmann	279.315US1	3317	
-	7590 02/19/2004	EXAMINER			
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			RIVELL, JOHN A		
P.O. Box 2938 Minneapolis, MN 55402		ART UNIT	PAPER NUMBER		
			3753		
			DATE MAILED: 02/19/2004		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)					
	••						
Notice of Allowability	09/748,796 Examiner	STAHMANN ET AL. Art Unit					
•							
	John Rivell	3753					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.							
1. X This communication is responsive to <u>REC,IDS filed 11/17/03</u> .							
2. The allowed claim(s) is/are <u>1-3,7-12 and 28-37</u> .							
3. \boxtimes The drawings filed on <u>04 August 2003</u> are accepted by the	Examiner.						
 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 							
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	or this communication to tile a reply (IENT of this application.	complying with the requirements					
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXAMINER' es reason(s) why the oath or declara	S AMENDMENT or NOTICE OF tion is deficient.					
6. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.						
(a) ☐ including changes required by the Notice of Draftspers		948) attached					
1) ☐ hereto or 2) ☐ to Paper No./Mail Date							
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date							
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).							
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
 Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 15 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☐ Examiner's Amendn	e					

Application/Control Number: 09/748,796

Art Unit: 3753

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 17, 2003 has been entered.

Claims 4-6 and 13-27 have been canceled. New claims 30-37 have been added. Thus claims 1-3, 7-12 and 28-37 are pending and allowed.

The following is an examiner's statement of reasons for allowance:

The prior art fails to anticipate or properly render obvious a "method for operating a cardiac pacemaker, comprising: sensing atrial depolarizations...; sensing ventricular depolarizations...; pacing a ventricle in accordance with a particular primary pacing mode; and, switching the pacemaker to an atrial fibrillation pacing mode upon detection of an atrial tachyarrhythmia, wherein the atrial fibrillation mode includes ventricular resynchronization pacing delivered in a biventricular inhibited demand mode with a selected biventricular offset interval" as recited in independent claim 1 and thus those claims dependent thereon.

Additionally, the prior art fails to anticipate or properly render obvious a "cardiac pacemaker, comprising: an atrial sensing channel for sensing atrial depolarizations and generating atrial sense signals in accordance therewith; one or more ventricular sensing channels...; right and left pacing channels for delivering paces to the light and left

ventricles; a controller for controlling the delivery of paces in accordance with a primary pacing mode; and, wherein the controller is configured to switch the pacemaker to an atrial fibrillation pacing mode upon detection of an atrial tachyarrhythmia, wherein the atrial fibrillation pacing mode includes ventricular resynchronization pacing delivered in a biventricular inhibited demand mode with a selected biventricular offset interval" as recited in independent claims 28 and thus those claims dependent thereon.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (703) 308-2599. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (703) 308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
Art Unit 3753